

atent Abstracts of Japan

FEB 1 9 2003 &

PUBLICATION NUMBER

2000009857

CUBLICATION DATE

: 14-01-00

APPLICATION DATE

26-06-98

APPLICATION NUMBER

10180445

APPLICANT:

MITSUBISHI ELECTRIC CORP;

INVENTOR:

FURUTA TADASHI;

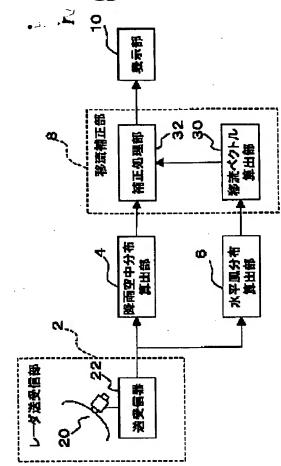
INT.CL.

G01W 1/14 G01S 13/46 G01S 13/50

G01S 13/95

TITLE

WEATHER RADAR DEVICE



ABSTRACT:

PROBLEM TO BE SOLVED: To provide a weather radar device for accurately correcting the advection while a raindrops are falling when measuring a rainfall distribution.

SOLUTION: A radar transmission and reception part 2 outputs echo intensity data and Doppler speed data based on a radar reflection wave. A horizontal wind distribution calculation part 6 assumes that a horizontal wind distribution changes continuously in an analysis volume and obtains a speed distribution corresponding to the volume. On the other hand, a part 4 for calculating the distribution of rainfall in the air obtains the spatial distribution of rainfall in the air. An advection vector calculation part 30 of an advection correction part 8 obtains an advection vector that is the amount of shift until a raindrop reaches the ground from the distribution of horizontal wind in the space where the raindrop falls being obtained by the horizontal wind distribution calculation part 6. A correction processing part 32 corrects the spatial distribution of rainfall based on the advection vector and obtains the distribution of rainfall on the ground.

COPYRIGHT: (C)2000,JPO